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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,719	11/17/2003	Janel E. Young	ETH5095	2358

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PHILIP S. JOHNSON
JOHNSON & JOHNSON
ONE JOHNSON & JOHNSON PLAZA
NEW BRUNSWICK, NJ 08933-7003

EXAMINER	
FUBARA, BLESSING M	

ART UNIT	PAPER NUMBER
1618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/714,719	YOUNG ET AL.	
	Examiner	Art Unit	
	BLESSING M. FUBARA	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/22/08*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) *14-41* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges receipt of request for extension of time, request for continued examination under 37 CFR 1.114, TD, amendment and remarks, all filed 5/22/08. Claims 1 and 13 are amended. Claims 1-41 are pending. Claims 14-41 were and are withdrawn from consideration. Applicant is reminded to use appropriate status identifiers in all future communications.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/22/08 has been entered.

Response to Arguments

Previous rejections that are not reiterated herein are withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-4, 8-10, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 administers tranilast directly onto the surface of the body cavity. Claim 3, which is dependent on claim 2, which is dependent on claim 1 selects the delivery vehicle from microcapsules, microspheres, barriers, liposomes, … and films. Since claim 1 administers the drug directly onto to the tissue, it is unclear how the delivery vehicles in claims 2 and 3 further limit the direct application of the tranilast. It would appear that a carrier vehicle is not needed to deliver the tranilast according to claim 1, where the tranilast is delivered to the tissue site since it is the drug itself that is administered to the site and not a composition containing the tranilast.

Claims 8-10 recite sustained or burst release in single doses and it is unclear how a drug that is administered to the site without any carriers to modify the release would be delivered in a sustained or burst release doses.

Claims 12 and 13 are equally confusing how the drug that is the neat drug that is not formulated with a carrier is administered systemically.

Clarification is respectfully requested.

4. Claims 1, 5, 6-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 administers the tranilast drug or analog to the tissue site and it is unclear how the drug is administered without any carrier and to achieve sustained of burst release in a dosage form. The claims are examined as if the tranilast is formulated with carriers as is evident in claims 2-4.

It is suggested that claim 1 be amended to indicate a composition of tranilast.

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101, which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-13 remain provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim1-13 of copending Application No. 10/797,367. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Response to Arguments

8. Applicant's arguments filed 5/22/08 have been fully considered but they are not persuasive.

9. Applicant traverses the provisional rejections under 35 U.S.C. 101 as claiming the same invention as that of claim1-13 of copending Application No. 10/797,367 on the grounds that the co-pending claims have not been issued and as such there can not be double patenting under 35 USC 101. The examiner disagrees. The rejection is provisional double patenting rejection because the copending claims have not been issued. Also, according to MPAP 804 [R-5], I B, the "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patenting rejection is the only rejection remaining in at least one of the applications." The provisional double patenting rejection is not the only rejections against the examined claims, hence the rejections will continue to be made.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-5 and 7-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Adachi et al. ("The prevention of Postoperative Intraperitoneal adhesions by Tranilast: N-(3',4'-dimethoxycinnamoyl) Anthranilic Acid) in Jpn. J. of Surg., (1999), 29, 51-54 .

Adachi discloses administration of tranilast that inhibits adhesion, post operatively and preoperatively; administration is oral and the recitation of systemic in claims 12 and 13 reads on oral; tranilast is administered melted and in combination with carboxymethyl cellulose sodium (left column 52, first full paragraph) so that Adachi meets the delivery vehicle of claims 2 and 3; the recitation of "amounts … effective to inhibit formation of adhesion" represents any amount deemed effective by the artisan so that that requirement of claims 1 and 5; Adachi administers 60 mg/kg/per day, pre and post operatively, thus meeting claim 11; the recitation that the barrier is absorbable is a property of the barrier so that the teaching of Adachi that the tranilast is administered with the cellulose derivative, carboxymethyl cellulose sodium; meets the limitation of the barrier and thus meets claim 4; Adachi discloses that it is well known in the art that tranilast is effective drug for bronchial asthma, atopic dermatitis, allergic rhinitis, decreasing granulation, inhibit collagen synthesis of human cheloid tissue transplanted onto the backs of mice (page 52, under materials and methods); regarding claims 8-10, it is noted that Adachi teaches single dose per day administration and Adachi's silence on burst or sustained release of

tranilast reflects an inherent teaching of either mode of release and the forms of release recited in claims 9 and 10 would flow from the composition that is administered and since Adachi administers the same composition as the claimed invention, it flows that the release of Adachi's formulation when administered meets the claimed release in claims 9 and 10. Regarding claim 7, one drug analog can be used in place of the other with the expectation of providing inhibitory effect on adhesions. While Adachi does not specifically state that the tranilast is administered directly to tissue surfaces in the body, it flows that oral administration of liquid or solution composition places the liquid or solution in direct contact with tissue surfaces so that the claims are met. In the alternate, it is obvious that the liquid or solution formulation bathes the tissue surfaces in the body when administered.

Response to Arguments

13. Applicant's arguments filed 5/22/08 have been fully considered but they are not persuasive.

Applicant argues that Adachi does not teach all the elements of the claims because Adachi does not administer tranilast directly to tissue surfaces as admitted by the examiner and that the specification at page 33, lines 5-10 ; page 34, lines 12-17 and Tables 12-16 show that local delivery of tranilast to the site is effective in reducing post operative adhesions and that oral administration does not.

14. **Response**:

The administration of liquid or solution by mouth places the liquid or solution in direct contact with the tissue surface of the oral cavity, which is a body cavity. The claims are directed to administration composition containing tranilast directly onto tissues surfaces in the body

cavity. The oral cavity is a body cavity and administration of the liquid or solution places the composition in contact with the tissues in the oral cavity. The data applicant points to in the specification does not indicate if the oral administration is by liquid or solution or tablet or capsule, the claims do not indicate body cavity that is other than buccal cavity, and the surgical procedure is not specific to any body cavity. Thus the data does not provide evidence that removes Adachi as art, but the day may also support the Adachi art. The buccal or oral cavity is not an external body part.

15. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. ("The prevention of Postoperative Intraperitoneal adhesions by Tranilast: N-(3',4'-dimethoxycinnamoyl) Anthranilic Acid) in view Hanson (US 6,376,242).

Claims 1-5 and 7-13 are rejected above. However, Adachi does not disclose the presence of other anti-inflammatory as recited in claim 6. But it is known according to Adachi that tranilast is effective drug for bronchial asthma, atopic dermatitis, allergic rhinitis, decreasing granulation, inhibit collagen synthesis of human cheloid tissue transplanted onto the backs of mice (page 52, under materials and methods). Hanson discloses that anti-inflammatory agents inhibit adhesions (column 5, lines 59 and 60) and that tranilast is an anti-cheloid agent that is known to reduce platelet count (column 15, lines 41, 67) Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use tranilast to inhibit adhesion as taught by Adachi. One having ordinary skill in the art would have been motivated to use the combination of an anti-inflammatory agent and tranilast and expect the combination of the tranilast and the anti-inflammatory agent to inhibit adhesion.

Response to Arguments

16. Applicant's arguments filed 5/22/08 have been fully considered but they are not persuasive.

Applicant states that Adachi discloses the use of systemic dosing with the results of the dosing indicating some level of adhesion prevention, and does not suggest direct application onto tissue within an internal cavity at a surgical site to prevent or substantially eliminate the occurrence of adhesions, that Hanson discloses treating a subject to inhibit vaso-occlusive event and does not contemplate the prevention of surgical adhesion; therefore, that the combination of Adachi and Hanson does not disclose or suggest applicant's invention; furthermore, applicant says that the examiner has not pointed to any teaching to suggest the desirability of combining the references.

The examiner disagrees. Oral administration of a liquid or solution composition into the buccal cavity brings the liquid or solution containing the tranilast into contact with the tissue of the oral cavity so that administration of a liquid into the oral body cavity meets local administration to the tissue in the oral cavity. The oral or buccal cavity is not an external cavity. The claim 1 say "internal body cavity" and the buccal cavity is an internal body cavity. Hanson is relied upon for teaching that anti-inflammatory agents inhibit adhesions and that tranilast is an anti-cheloid agent that is known to reduce platelet count. The combination of Hanson and Adachi provides a teaching of using anti-inflammatory agent together with tranilast to inhibit adhesion and this is the suggestion relied upon by the examiner, that is, tranilast as well as anti-inflammatory agents inhibit adhesion are shown in the art to inhibit adhesions. It is therefore

prima facie obvious that a combination of tranilast and anti-inflammatory agent would reasonable be expected to successfully inhibit adhesions.

17. Therefore, applicant's arguments **have not been** found persuasive and the rejections are maintained.

18. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubbell et al. (US 6,461,640) in view of Chandrasekar et al. ("Platelets and Restenosis," in Journal of the American College of Cardiology, Vo. 35, No. 2, 2000, pp 555-562) or Miyazawa et al. ("Effects of pemirolast and tranilast on intimal thickening after arterial injury in the rat," in Journal of Cardiovascular Pharmacology, Vol. 30, no. 2, Aug. 1997, abstract) or Adachi Adachi et al. ("The prevention of Postoperative Intraperitoneal adhesions by Tranilast: N-(3',4'-dimethoxycinnamoyl) Anthranilic Acid) in Jpn. J. of Surg., (1999), 29, 51-54) and further in view of Sheffield et al. (EP 0 225 162) or Hunter et al. (US 6,759,431).

19. Claim 1 is directed to method for the inhibition of post-operative adhesion formation in an internal body cavity, the method comprises administering tranilast or an analog thereof, directly onto said tissue surfaces in said body cavity. Therapeutically effective amount of the tranilast or analog thereof is administered to inhibit the adhesion.

To expedite examination of the claims, the claim is examined as administering a composition containing tranilast or analog of tranilast present in a effective amount to inhibit the adhesion. No specific body cavity is claimed and no specific carrier is claimed and the broad administration encompasses all administration forms. Effective amount is any amount deemed or found effective to inhibit the adhesion by the artisan.

20. Hubbell discloses that surgical adhesion such as surgical or post surgical adhesions are preventable by topical administration, to a site of tissue injury, of polymeric matrix comprising agents that are known to inhibit adhesions (abstract; column 3, line 64 to column 4, line 14; claims 1-16). The agents in Hubbell are hirudin, ancrod and others (column 4, lines 23-33; claims 1-16) using effective amount of one or more of the agents is administered topically to an area where adhesions are to be prevented (column 4, lines 34-36). The topical administration locally to the site needing adhesion prevention meets the claimed method in claims 1, and 8-10 since controlled or sustained release is provided by the polymeric matrix (abstract, column 1, lines 14, 56; column 3, line 67 to column 4, line 14; column 4, line 62; column 5, line 45 to column 6, line 11; column 6, line 64 to column 7, line 22; column 10, lines 42 and 43; column 14, line 36; claims 1, 10 and 15). None of the active agents in Hubbell is tranilast or anti-inflammatory agent.

21. But Chandrasekar (first full paragraph, left column of page 559) and Miyazawa (abstract) teach that tranilast and pemirolast are anti-allergic agents known to reduce intimal thickening. Furthermore, Adachi uses tranilast containing composition to inhibit adhesion using single dose per (meeting claims 9 and 10) for systemic administration meeting claims 12 and 13 (see Adachi at page 52, first full paragraph, left column; page 52, materials and method).

22. Further also, Sheffield discloses topical administration of anti-inflammatory drug to inhibit post surgical adhesion (title, abstract, the whole document and specifically pages 1-7); Hunter delivers to external portion of body passageway compositions containing therapeutic to treat diseases associated with the body passageways (column 4, lines 5-19, 27-33, 41-47); the active agents are not limited to a few but tranilast is named as one of anti-allergic or

decongestant agents column 18, line 66; column 19, line 6), adhesion is one of the conditions of the body passageway that is treatable (column 2, line 48) Sheffield and Hunter are thus relied upon for teaching external administration of anti-inflammatory agents and anti-allergic agents such as tranilast to treat or inhibit adhesion.

23. Therefore, taking the general teachings of the prior art, one having ordinary skill in the art at the time the invention was made would have reasonable expectation of success that topically administration of compositions containing anti-inflammatory agents and tranilast and further systemic administration of tranilast in effective amounts would inhibit post surgical adhesion.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLESSING M. FUBARA whose telephone number is (571)272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Blessing M. Fubara/
Examiner, Art Unit 1618